

<b>SANYO</b>	No.1005B	<b>2SK315</b>
	N-Channel Junction Silicon Field-Effect Transistor	
FM TUNER APPLICATIONS		

**Features**

- . Ideal for FM tuners in radios, stereos, etc.
- . Because it is compactly packaged, sets can be made compact.
- . Small  $c_{rss}$  ( $c_{rss}=0.08pF$  typ).
- . High  $y_{fs}$  ( $y_{fs}=12.0ms$  typ).

**Absolute Maximum Ratings at Ta=25°C**

			unit
Gate to drain voltage	$V_{GDO}$	-20	V
Gate current	$I_G$	10	mA
Drain current	$I_D$	20	mA
Allowable power dissipation	$P_D$	200	mW
Junction temperature	$T_J$	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C

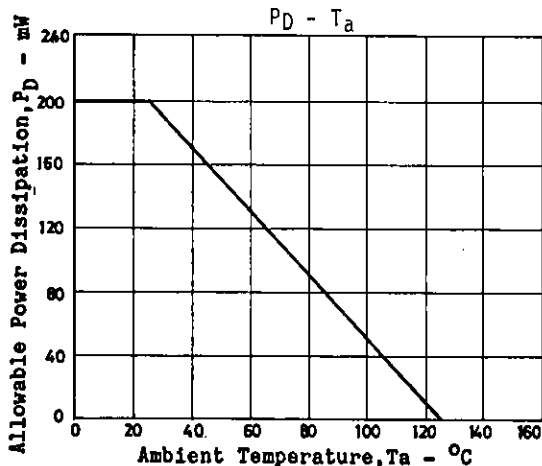
**Electrical Characteristics at Ta=25°C**

			min	typ	max	unit
Gate to drain breakdown voltage	$V_{(BR)GDO}$	$I_G=-10\mu A$	-20			V
Gate cutoff current	$I_{GSS}$	$V_{GS}=-0.5V, V_{DS}=0V$			-10	nA
Drain current	$I_{DSS}$	$V_{DS}=5V, V_{GS}=0V$	2.5*		24.0*	mA
Cutoff voltage	$V_{GS(off)}$	$V_{DS}=5V, I_D=10\mu A$			-3.5	V
Forward transfer admittance	$ y_{fs}  (1)$	$V_{DS}=5V, V_{GS}=0V, f=1kHz$	6.0	12.0		ms
Forward transfer admittance	$ y_{fs}  (2)$	$V_{DS}=5V, V_{GS}=0V, f=100MHz$	6.0	12.0		ms
Input capacitance	$c_{iss}$	$V_{DS}=5V, V_{GS}=0V, f=1MHz$		8.0		pF
Reverse transfer capacitance	$c_{rss}$	$V_{DS}=5V, V_{GS}=0V, f=1MHz$		0.08	0.3	pF
Output capacitance	$c_{oss}$	$V_{DS}=5V, V_{GS}=0V, f=1MHz$		6.5		pF
Power gain	$PG$	$V_{DS}=5V, V_{GS}=0V, f=100MHz$		23		dB
Noise figure	$NF$	$V_{DS}=5V, V_{GS}=0V, f=100MHz$		2.2	4.0	dB

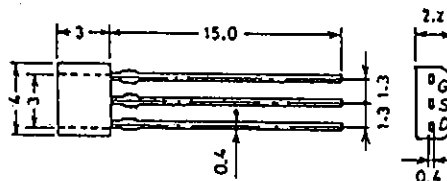
Refer to specified test circuit.  
See specified Test Circuit.

\* The 2SK315 is graded as follows by  $I_{DSS}$  (unit: mA):

2.5	E	6.0	5.0	F	12.0	10.0	G	24.0
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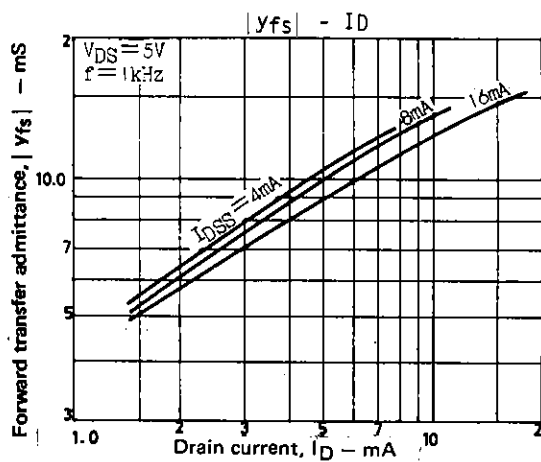
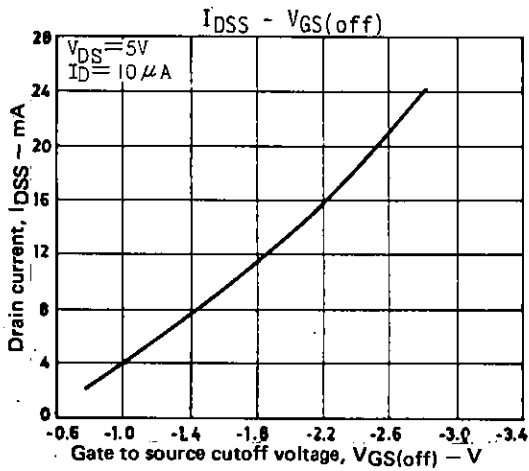
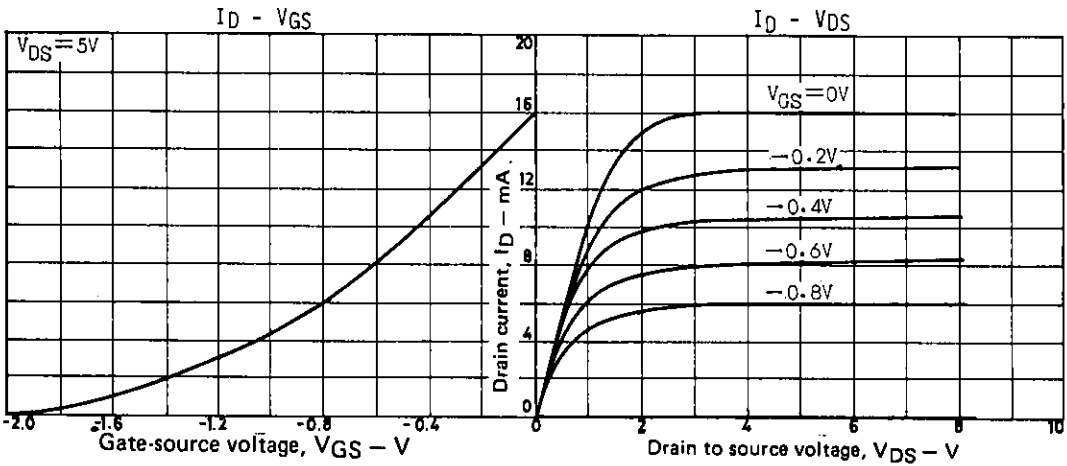
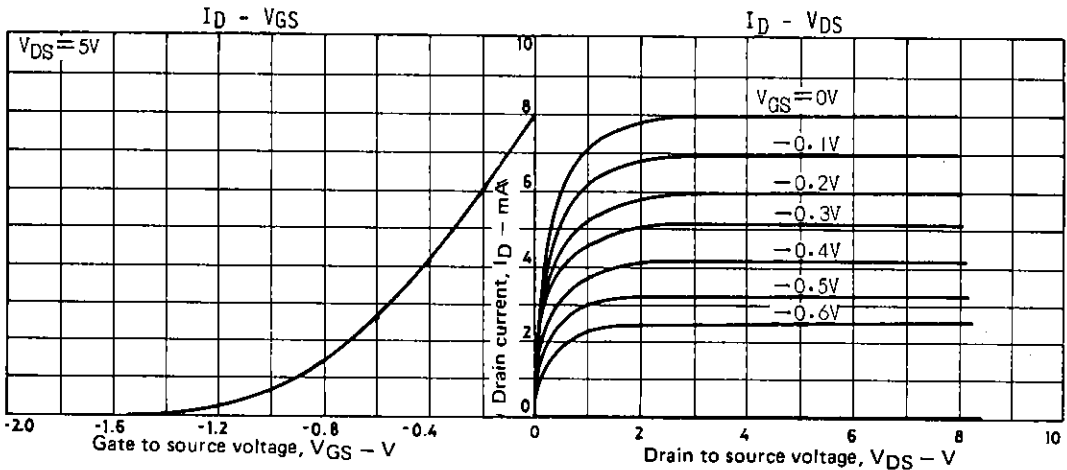
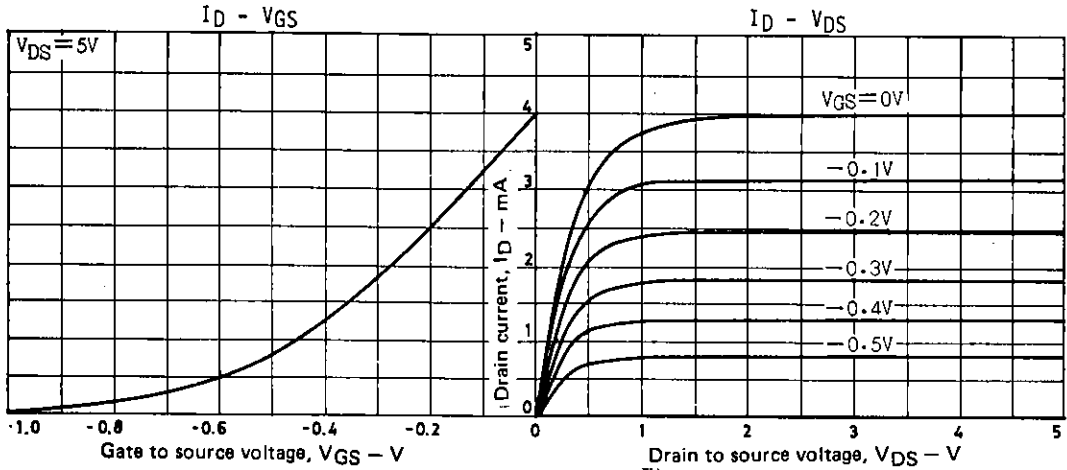


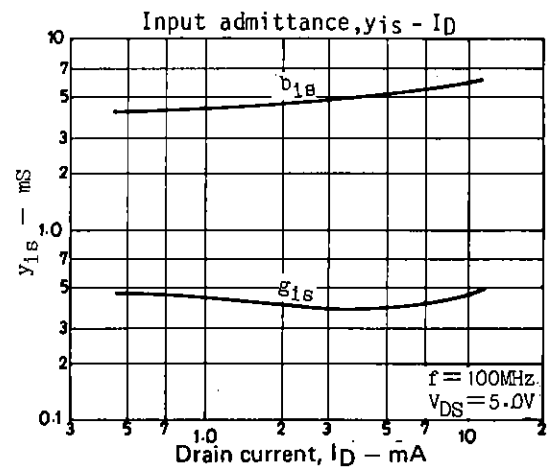
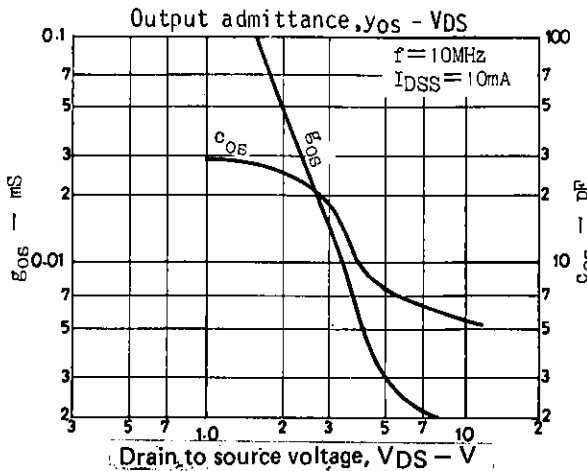
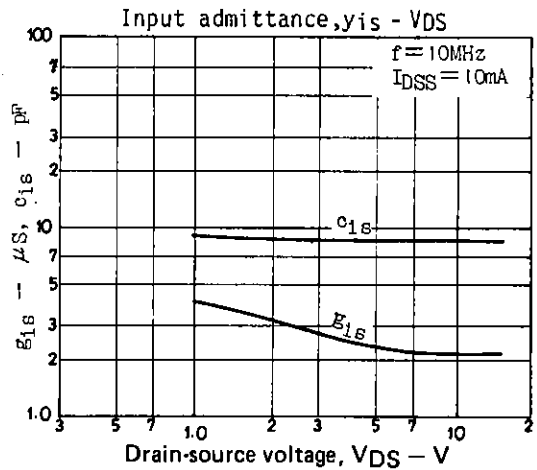
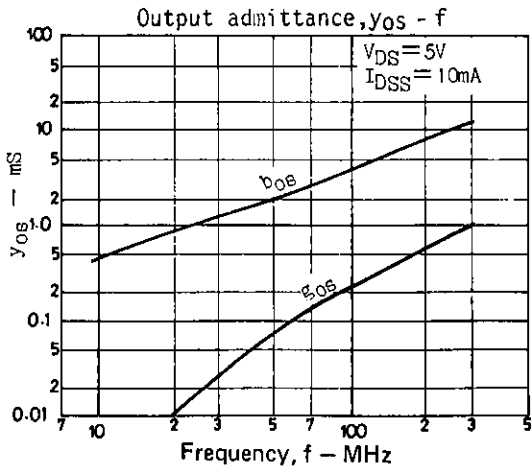
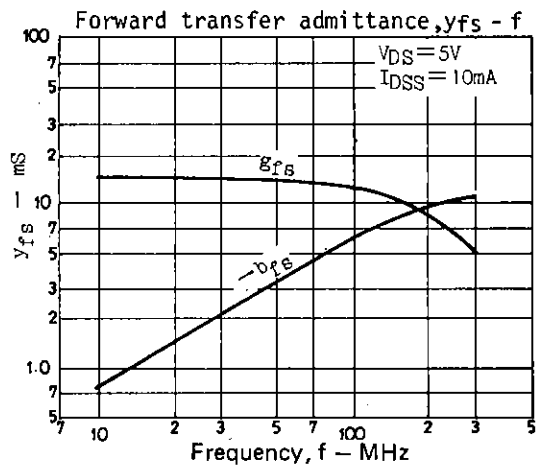
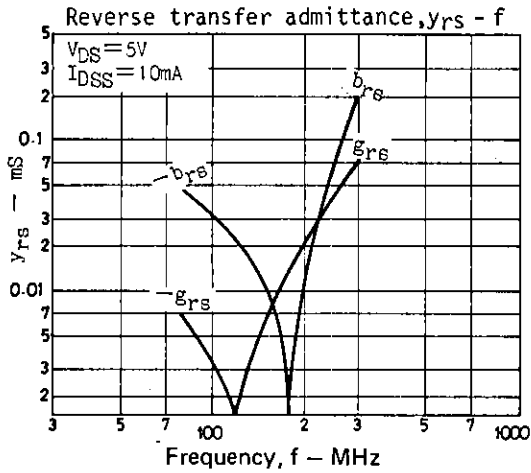
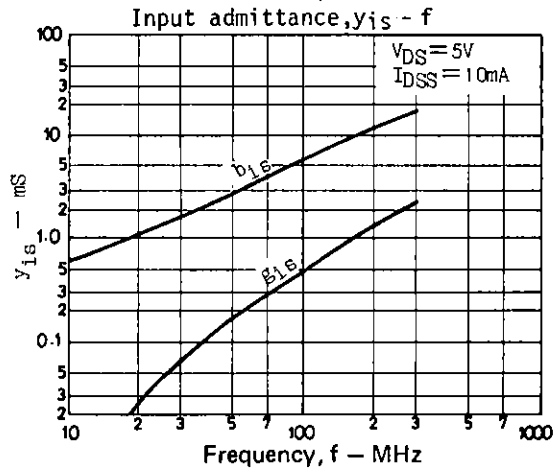
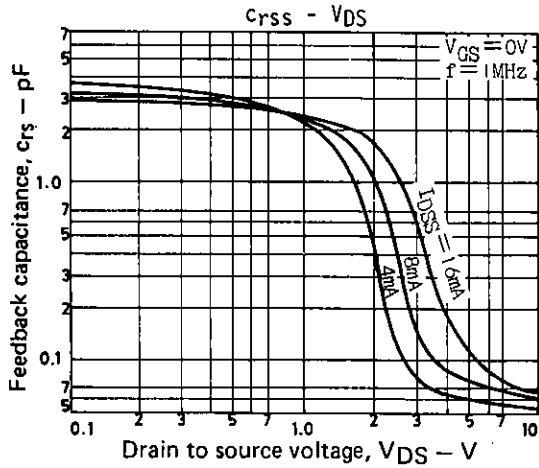
**Package Dimensions 2040**  
(unit: mm)

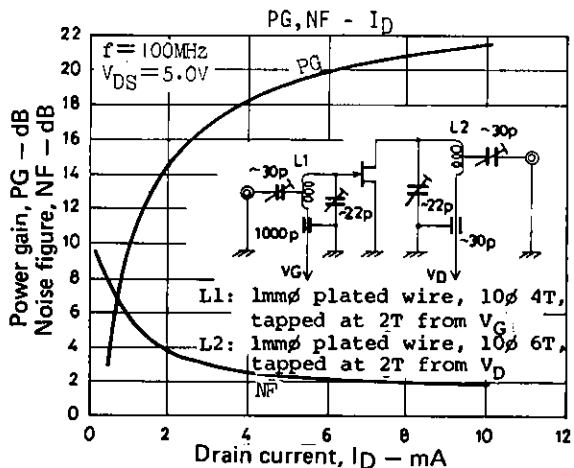
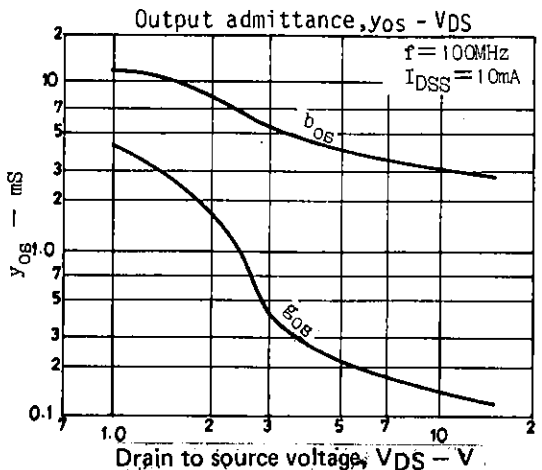
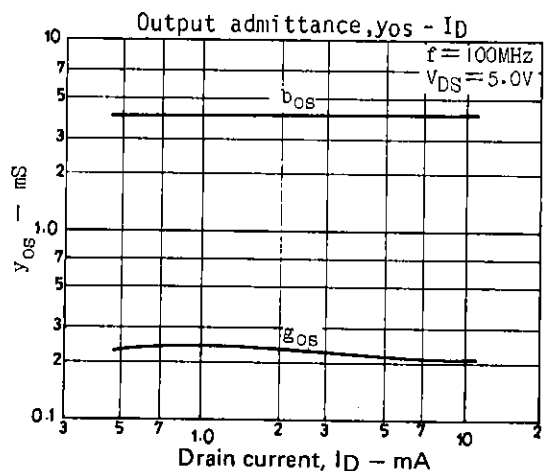
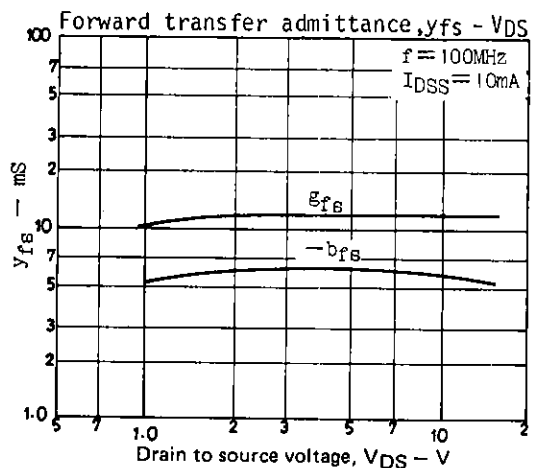
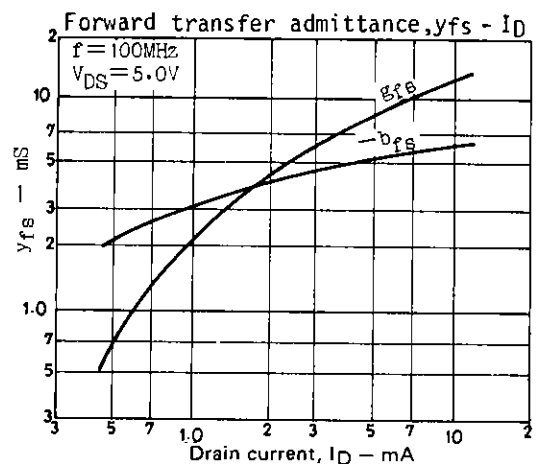
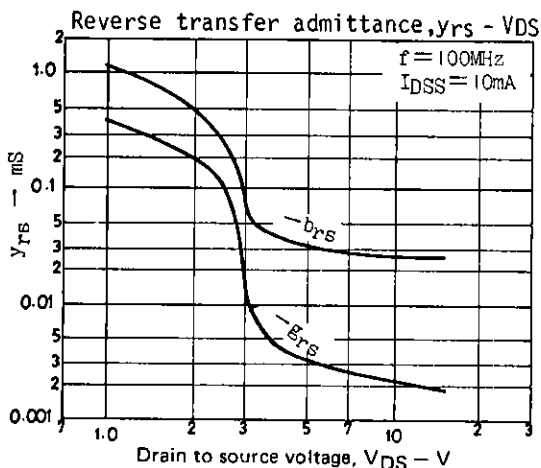
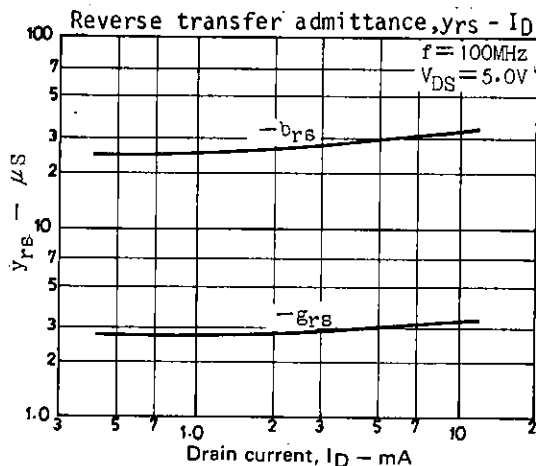
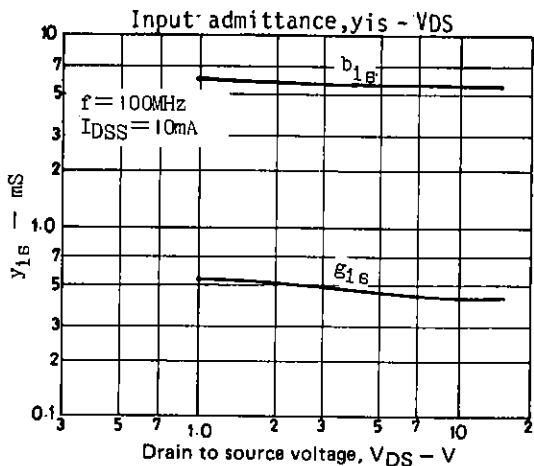


G: Gate  
S: Source  
D: Drain

SANYO: SPA







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